



**REGULAR MEETING AND PUBLIC HEARING
OF THE NORTH BEND PLANNING COMMISSION**

Thursday January 11, 2018, 7:00-9:00 PM

City Hall – 211 Main Avenue N.

AGENDA

- 1. 7:00 Call to order and roll call**
- 2. 7:01 Approval of Minutes for December 14, 2017 PC Meeting**
- 3. 7:02 Public comment on non-agenda items**
- 4. 7:05 Public Hearing – Development Agreement for Tanner Electric Headquarters**
- 5. 7:10 Planning Commission deliberation and recommendation – Development Agreement for Tanner Electric Headquarters**
- 6. 7:40 Public Hearing – NBMC 19.05 amendments – New street standards for Park Street**
- 7. 7:45 Planning Commission deliberation and recommendation – NMBC 19.05 amendments – New street standards for Park Street.**
- 8. 8:30 Summary presentation on North Bend Full Buildout Traffic Impact Analysis Report (Public Works Director Mark Rigos)**

Agenda & Package distribution by hard copy: Planning Commission, City Hall Front Desk, CED Front Desk, and staff with agenda items

Agenda & Package distribution by e-mail: Mayor, Council, Planning Commission, Administrator, City Clerk, City Attorney, and members of the public who have requested it.



GUIDELINES FOR CITIZEN PARTICIPATION

At Planning Commission Meetings

Citizen Participation and Contribution. Citizens are welcome and encouraged to attend all Planning Commission meetings and are encouraged to participate and contribute to the deliberations of the Commission. Recognition of a speaker by the Planning Commission Chair is a prerequisite to speaking and is necessary for an orderly and effective meeting. It will be expected that all speakers will deliver their comments in a courteous and efficient manner. At anytime during the meeting anyone making out-of-order comments or acting in an unruly manner will be subject to removal from the meeting.

Right to Speak at Public Hearing. Any person has the right to speak at any Public Hearing on the item on the agenda after the staff report and any clarifying questions of the Planning Commission, but before the Planning Commission has discussed the item and action is taken. Speakers are requested to supply their contact information requested on the sign-in sheet to assist the Clerk with the Minutes.

Manner of Addressing Planning Commission. Each person desiring to address the Planning Commission shall stand, state his/her name and address for the record, and unless further time is granted by a majority of the Planning Commission, must limit his/her remarks to three (3) minutes. All remarks shall be addressed to the Chair of the Planning Commission and not to any member individually. All speakers shall be courteous and shall not engage in, discuss or comment on personalities or indulge in derogatory remarks or insinuations.

Spokesperson for Group of Persons. In order to expedite matters and to avoid repetitious presentations, delay or interruption of the orderly business of the Planning Commission, whenever any group of persons wishes to address the Planning Commission on the same subject matter, it shall be proper for the Chair of the Planning Commission to request that a spokesperson be chosen by the group to address the Planning Commission.

Items Not on the Agenda (Citizen's Comments). The Chair of the Planning Commission will provide an opportunity for Citizens to speak on any subject that is not part of the Planning Commission Agenda for that night's meeting. Each person desiring to address an item that is not on the Planning Commission Agenda shall stand, state his/her name and address for the record, state the subject he/she wishes to discuss, if he/she is representing a group or organization the name should be stated, and unless further time is granted by a majority of the Planning Commission, must limit his/her remarks to three (3) minutes. Speakers are requested to supply the contact information requested on the sign-in sheet to assist the Clerk with the Minutes.

CITY OF NORTH BEND PLANNING COMMISSION
- ACTION MEETING MINUTES -
Thursday, December 14, 2017 at 7:00 PM
City Hall, 211 Main Ave. N., North Bend, WA 98045

Please Note: A complete audio recording of this meeting is available on the City of North Bend website, www.northbendwa.gov, under: Government - Boards & Commissions - Planning Commission - Meeting Audio

CALL TO ORDER

The meeting was called to order at 7:02 PM.

ROLL CALL

Planning Commissioners present: Gary Fancher (Chair), Elizabeth Gildersleeve, Scott Heller, Mary Miller, Dick Ryon, and Curtis von Trapp (arrived at 7:14 PM). Commissioner Luckey was unable to attend, and has been excused from tonight's meeting. City Staff Present: Mike McCarty, Senior Planner; David Miller, Community & Economic Development Director.

AGENDA ITEM #2: Approval of November 9, 2017 Planning Commission Meeting Minutes

The Minutes for the November 9, 2017 Meeting were Approved.

AGENDA ITEM #3: Public Comment on Non-Agenda Items

There was no comment received on any non-agenda item.

AGENDA ITEM #4: Introduction – Zoning Map Amendments Concerning Extent of Cottage Residential Zone (Hearing on January 11, 2017)

David Miller briefed the Commissioners on the Zoning Amendments, and what needs to be accomplished at tonight's meeting. Mr. Miller advised the Commissioners of the upcoming Council Retreat scheduled for January 23 and January 30, 2018. Mr. Miller also advised the Commissioners that at the next Planning Commission Meeting the city-wide Transportation Analysis will be presented.

Commissioner Ryon asked whether the Economic Development Commission is still functioning. Mr. Miller answered yes, they are very involved in branding and explained some of the activities the EDC is performing. Mr. Miller also gave some specifics on Plymouth Poultry, and their company needs and the city's requirements.

Mr. Miller spoke about the Sallal Water Association.

Chair Fancher asked Mr. Miller if the city's upcoming retreat is on the city calendar. Mr. Miller answered it should be, and that he would check with the city clerk.

There was discussion between Chair Fancher and Mr. Miller on a metered traffic circle.

Mike McCarty briefed the Commissioners on where the Commission is on the Zoning map amendments concerning cottage residential Zone, as well as the progress the Community & Economic Development Council Committee is making on the Table of Permitted Uses and the Performance Standard Amendments. Mr. McCarty said that the CED Committee should wrap up their review of changes at their next meeting (currently scheduled for December 19, 2017).

At 7:14 PM, Commissioner von Trapp arrived at the meeting.

1 There was discussion between the Commissioners and city staff concerning the geographic limits and locations of
2 the Cottage Zone.

3
4 There was discussion of the Dahlgren Project, including whether they are vested to the old regulations. Mr.
5 McCarty stated they are not.

6
7 There was continued discussion, including questions and answers, between the Commissioners and city staff
8 concerning the geographic limits and specific locations of the Cottage Zone. The discussion also included the
9 water table in the downtown; tree retention; the city's branding of being the outdoor recreation destination; light
10 rail; mixed uses, or blended zones; speed limit change recommendations from the city's Traffic Analysis; new
11 round-about construction and the possibility of metering through traffic; truck traffic; traffic congestion; traffic
12 patterns; and road widths.

13
14 Mr. McCarty advised the Commissioners that if they recommend no changes concerning the extent of the Cottage
15 Residential Zone, a follow up Public Hearing would not be required.

16
17 There was a consensus among the Commissioners not make any changes to the extent of the Cottage Residential
18 Zone.

19
20 Mr. McCarty briefed the Commissioners on the next items that will be brought to the Planning Commission for
21 review at their next meeting on January 11, 2018. There was discussion of the Commission's upcoming schedule
22 and items for review.

23
24 Commissioner Ryon discussed the removal of the turn lane on southbound Main Avenue at North Bend Way, and
25 that the crosswalks at that location are difficult to see. There discussion of the crosswalks and their need to be re-
26 striped next year.

27
28 **For the Good of the Order**

29 Chair Fancher asked if anyone had anything for the good of the order.

30
31 Chair Fancher said that at the first meeting of the Planning Commission in March 2018, the Commission will vote
32 on a new chair and vice-chair.

33
34 Commissioners offered their congratulations to Chair Fancher (on his election to the school board) and asked if he
35 would be remaining (on the Planning Commission). Chair Fancher answered that his appointment begins January
36 4, 2018, and he has asked the School Superintendent if they can move their meeting dates, which is under
37 discussion. Chair Fancher said he will remain at least through the end of his term, which is May 18, 2018.

38
39 **ADJOURNMENT**

40 The meeting was adjourned at 8:10 PM.

41
42 **NEXT PLANNING COMMISSION MEETING:**

43 The next Planning Commission meeting will be held January 11, 2018 at the City Hall Conference Room.

44
45 ATTEST:

46
47 _____
Gary Fancher (Chair)

David Miller, City of North Bend

Agenda Item 4-5.

Figure 10-1



DATE: January 2, 2018
 TO: Planning Commission
 FROM: Lynn Hyde, Economic Development Manager and Planner
 SUBJECT: Development Agreement for Tanner Electric Headquarters

Planning Commission,

Attached are proposed street standards specific to Park Street (from Bendigo/SR202 intersection to North Bend Way intersection). We are beginning to see proposals to redevelop properties along Park Street. With redevelopment we will see improvements to our streets. Park Street is currently classified as a collector street. Because of the increased traffic we are seeing as users are traveling on Park Street as an alternative to downtown, and the expected increase in traffic once the roundabout at North Bend Way and Park Street/Downing is constructed, city staff believes we need to take a closer look at exactly what the street sections should be on Park Street.

Park Street has been broken up into three different sections because of the existing built conditions and adjacent users:

1. Bendigo to Main Street: The adjacent users are commercial therefore wide sidewalks are important. There will be a high volume of west bound cars turning left (or south) onto Bendigo, therefore a turning lane is necessary to keep traffic flowing. There is also on street parking provided on the north side of the road to serve the commercial buildings. This is consistent with what was recently constructed.
2. Main Street to Cedar Ave S: This portion also has adjacent commercial users and we would like to see wider sidewalks were possible. In addition, there will be higher volumes of traffic turning therefore we are recommending the 12-foot turn lane. Staff believes bikes lanes are important up to Main Street intersection and are recommended for this section.
3. Cedar Ave S to North Bend Way: This portion of Park Street has primarily residential users adjacent. There are driveways but not main roads intersecting. Therefore, staff recommends removing the 12-foot turn lane and including on street parking at 7.5-feet on either side to serve the residential users.

During discussions some of the items city staff feel are important (not prioritized):

- Flow of traffic (this will be a street used to bypass downtown and we anticipate added traffic volumes). Therefore, staff is recommending two 11-foot travel lanes with a 12-turn lane when needed.
- Pedestrian use: This street is in our downtown commercial core and allows business and multifamily users. We anticipate higher levels of foot traffic and want to encourage pedestrian safety. Therefore, staff is recommending the widest sidewalks possible working within existing conditions (existing buildings that will likely not redevelop).
- Bicyclist: We are seeing more and more cyclists using our streets. In addition, this will be one of the main roads connecting communities, destinations and parks. City staff is proposing a 5-foot

Community and Economic Development Department

126 E. 4th St, North Bend WA, 98045

Tel: 425.888.5633 / Fax: 425.888.5636



bike lane for the majority of the length of Park Street. The bike lanes do not extend past Main however because there is not enough right of way width, and staff anticipates cyclists will either be merging with traffic to turn left and head south at Bendigo, or take a right on Main to head north. More experienced and comfortable cyclists may merge with traffic at this point to take a right or a left.

- Street trees: staff has proposed a recommended tree species and treatment per the recommendation of our arborist. While we do believe that one species should be used for the entirety of the street, we understand unforeseen circumstances may arise, and have left the ability for the director to make the final decision.

City Staff recommends the attached street standards.

Sincerely,

Lynn Hyde
Economic Development Manager & Planner
City of North Bend
Phone: 425-888-7646

that one-year time period. (Ord. 1256 § 1 (part), 2006: Ord. 1053 § 34, 1998: Ord. 1020 (part), 1997).

18.26.060 Appeals.

Appeals to any decisions of the examiner relating to variances shall be administered per guidelines in Chapter 20.06 NBMC. (Ord. 1256 § 1 (part), 2006: Ord. 1053 § 36, 1998: Ord. 1020 (part), 1997. Formerly 18.26.080).

Chapter 18.27

DEVELOPMENT AGREEMENTS

Sections:

- 18.27.010 Development agreement – Authorized.
- 18.27.020 Development agreement – Purpose.
- 18.27.025 Development agreement – Review process and fees.
- 18.27.030 Development agreement – Application requirements.
- 18.27.040 Development standards, flexibility.
- 18.27.050 Exercise of city police power and contract authority.
- 18.27.060 Form.
- 18.27.070 Conditions of approval.

18.27.010 Development agreement – Authorized.

The city may enter into a development agreement with a person having ownership or control of real property within its jurisdiction. The city may enter into a development agreement for real property outside its boundaries as part of a proposed annexation or a service agreement. A development agreement must set forth the development standards and other provisions that shall apply to and govern and vest the development, use, and mitigation of the development of the real property for the duration specified in the agreement. (Ord. 1256 § 1 (part), 2006).

18.27.020 Development agreement – Purpose.

A. The purpose of this development agreement chapter is to implement RCW 36.70B.170 which authorizes the city to enter into “development agreements” with persons having ownership or control of real property. In adopting such statute, the city council concurs with the Washington State legislative findings as follows:

The lack of certainty in the approval of development projects can result in a waste of public and private resources, escalate housing costs for consumers and discourage the com-

mitment to comprehensive planning which would make maximum efficient use of resources at the least economic cost to the public. Assurance to a development project applicant that upon government approval the project may proceed in accordance with existing policies and regulations, and subject to conditions of approval, all as set forth in a development agreement, will strengthen the public planning process, encourage private participation and comprehensive planning, and reduce the economic costs of development. Further, the lack of public facilities and services is a serious impediment to development of new housing and commercial uses. Project applicants and local governments may include provisions and agreements whereby applicants are reimbursed over time for financing public facilities. It is the intent of the Legislature by RCW 36.70B.170 through 36.70B.210 to allow local governments and owners and developers of real property to enter into development agreements;

B. Additionally, the city council found that development agreements may be appropriate in certain circumstances as a means to consolidate numerous issues involved in complex development projects into a single controlling instrument, benefiting the city, its citizens, and members of the regulated public; and

C. The city council found that the use of development agreements may further the objective of the comprehensive plan and development regulations adopted pursuant to the comprehensive plan. (Ord. 1256 § 1 (part), 2006).

18.27.025 Development agreement – Review process and fees.

A. A duly noticed public hearing pursuant to RCW 36.70B.200 and recommendation on the development agreement shall be made to the city council by the planning commission. The development agreement shall be subject to review and approval by the city council based on the record of the planning commission hearing. The decision of the city council to

approve or reject a request for a development agreement shall be a discretionary, legislative act.

B. Fees for a development agreement review shall be as established by city schedule and collected at the time of the development agreement application. (Ord. 1256 § 1 (part), 2006).

18.27.030 Development agreement – Application requirements.

Applicants for a development agreement shall meet first with the technical review committee of the city to review the codes and policies applicable to the proposed application. Applications for development agreements shall include, but are not limited to, the following:

A. Project elements such as permitted uses, residential densities, and nonresidential densities and intensities or building sizes;

B. The amount and payment of impact fees imposed or agreed to in accordance with any applicable provisions of state law, any reimbursement provisions, other financial contributions by the property owner, application fees, administrative charges, inspection fees, drafting fees, or dedications;

C. Concurrent provisions of water, sewer, transportation facilities, and storm drainage under Chapter 20.12 NBMC, along with mitigation measures, development conditions, and other requirements under Chapter 14.04 NBMC, protection of critical areas under Chapters 14.05 through 14.12 NBMC, and stormwater management under Chapter 14.16 NBMC;

D. Design standards such as maximum heights, setbacks, drainage and water quality requirements, building architectural elements, lighting, landscaping, parking, and other development features in this title;

E. Affordable housing;

F. Parks and open space preservation;

G. Phasing;

H. Review procedures and standards for implementing decisions;

I. A build-out or vesting period for applicable standards;

J. A written analysis of consistency with the comprehensive plan; and

K. Any other development agreement application requirement or procedure deemed appropriate by the city council. (Ord. 1256 § 1 (part), 2006).

18.27.040 Development standards, flexibility.

A development agreement shall be consistent with applicable development regulations to the fullest extent possible; provided, a development agreement may allow development standards different from those otherwise imposed under the North Bend Municipal Code in order to provide flexibility to achieve public benefits, respond to changing community needs, or encourage modifications that provide the functional equivalent or adequately achieve the purposes of otherwise applicable city standards. Any development standards approved pursuant to a development agreement that differ from those in this code shall not require any further zoning reclassification, variance from city standards or other city approval apart from development agreement approval. The development standards as approved through a development agreement shall apply to and govern the development and implementation of each covered site in lieu of any conflicting or different standards or requirements elsewhere in the North Bend Municipal Code. Subsequently adopted standards that differ from those of a development agreement adopted by the city as provided in this chapter shall apply to the covered development project only where necessary to address imminent public health and safety hazards or where the development agreement specifies a time period or phase after which certain identified standards can be modified. Determination of the appropriate standards for future phases which are not fully defined during the initial approval process may be postponed. Building permit applications shall be subject to the building codes in effect when the permit is applied for. (Ord. 1256 § 1 (part), 2006).

18.27.050 Exercise of city police power and contract authority.

As provided in RCW 36.70B.170(4), the execution of a development agreement is a proper exercise of the city's police power and contract authority. Accordingly, a development agreement may obligate a party to fund or provide services, infrastructure, or other facilities. A development agreement shall reserve authority to impose new or different regulations to the extent required by a serious threat to public health and safety. (Ord. 1256 § 1 (part), 2006).

18.27.060 Form.

Development agreements shall be consistent with RCW 36.70B.170 through 36.70B.210. All development agreements shall be in form and content as approved by the city attorney. (Ord. 1256 § 1 (part), 2006).

18.27.070 Conditions of approval.

In approving a development agreement, conditions of approval shall at a minimum establish:

A. A site plan for the entire project, showing locations of critical areas and buffers, required open spaces, perimeter buffers, location and range of densities for residential development, and location and size of nonresidential development;

B. The expected build-out time period for the entire project and the various phases;

C. Project phasing and other project-specific conditions to mitigate impacts on the environment, on public facilities and services including transportation, utilities, drainage, police and fire protection, schools, and parks;

D. Road and stormwater design standards that shall apply to the various phases of the project;

E. Bulk design and dimensional standards that shall be implemented throughout subsequent development within the project;

F. The size and range of uses authorized for any nonresidential development within the project;

G. The minimum and maximum number of residential units for the project;

H. Any sewer and/or water comprehensive utility plans or amendments required to be completed before development can occur; and

I. Conceptual plans for open space, recreation, parking, landscaping, lighting and building design. (Ord. 1256 § 1 (part), 2006).

Chapter 18.28

REZONES¹

(Repealed by Ord. 1256)

1. Prior legislation: Ords. 1237, 1020, 718, 625 and 336.

**DEVELOPMENT AGREEMENT
BETWEEN THE CITY OF NORTH BEND
AND TANNER ELECTRIC COOPERATIVE
FOR THE
TANNER ELECTRIC COOPERATIVE CAMPUS**

THIS DEVELOPMENT AGREEMENT (“Agreement”) is made and entered into this ____ day of JANUARY, 2018, by and between the City of North Bend, a municipal corporation of the State of Washington (the “City”) and Tanner Electric Cooperative, a rural electric organization organized under the laws of the State of Washington (the “Developer”), jointly (the “Parties”).

WHEREAS, Developer owns or controls King County Tax Parcel No. 1323089098, located within the City; and

WHEREAS, Developer has proposed to construct additional structures and improvements for the Developer’s existing administrative and operations functions located in the Employment Park-2 zoning district in the City of North Bend (the “Project”); and

WHEREAS, this form of development is consistent with North Bend’s Comprehensive Plan goals and policies for this area; and

WHEREAS, the City has agreed to allow the project to be built in three (3) separate phases, with only the first phase designed as of the date of this Agreement; and

WHEREAS, the Washington State Legislature has authorized the execution of a development agreement between a local government and a person having ownership or control of real property within its jurisdiction (RCW 36.70B.170(1)); and

WHEREAS, a development agreement must set forth the development standards and other provisions that shall apply to, govern, and vest the development, use and mitigation of the real property for the duration specified in the agreement (RCW 36.70B.170(1)); and

WHEREAS, a development agreement must be consistent with the applicable development regulations adopted by local government planning under RCW Chapter 36.70A; and

WHEREAS, a development agreement must be approved by ordinance or resolution after a public hearing pursuant to RCW 36.70B.200; and

WHEREAS, on June 1, 2017, a Determination of Non-Significance (“DNS”) was issued for this Agreement and the Project described herein; and

WHEREAS, on _____, 201____, the City Council passed Resolution No. XXX, approving and authorizing the Mayor to enter into this Agreement on behalf of the City;

NOW THEREFORE, in consideration of the mutual promises set forth herein, the parties hereto agree as follows:

1. The Project Site. The Project Site is a 2.52-acre (109,630 sf) parcel currently occupied by Developer and located north of SE North Bend Way (45710 SE North Bend Way). The south end of the 140 foot wide parcel is fully developed and currently contains two structures, Developer's administration and operations building, and its vehicle storage building. The vehicle storage building is open on one side and non-heated. The remainder of the south portion of the site is dedicated to parking and secured outdoor storage, most of which is asphalt with the center portion being gravel. The north end of the site comprises approximately one-half of the site and is undeveloped and wooded. The Project Site is comprised of King County Parcel No. 1323089098, and more particularly described in the attached **Exhibit A**.

2. The Project. The Project is the further development and use of the entire Project Site as a campus for Developer to eliminate the cramped conditions under which it now operates. The Project will be completed in three (3) phases, with Phase 1, Phase 2, and Phase 3 described as follows:

A. Phase 1

1. Design and build a new 7,965 sf Administration Building on the north end of the undeveloped site, as shown on Exhibit B;
2. Design and build paved parking lot(s) and associated parking lot landscaping as required for Phase 1 improvements. Parking lot landscaping to be increased to 12% of asphalt paving;
3. Building and parking full cut-off lighting to minimum levels per North Bend Municipal Code (NBMC) Chapter 18.40;
4. Design new Emergency Operations Center (EOC) functions into the new building and add on-site generated power;
5. State Environmental Protection Act (SEPA) review (to cover Phase 1);
6. Site and landscaping improvements up to the existing storage yard on the south end of the site;
7. Landscaping improvements along the east and west property lines from the new developments on the north end of the site to SE North Bend Way;
8. Variance to reduce the centerline distance along SE 140th Street between 457th Avenue SE and the Tanner Electric Administration Building parking access. This distance shall be reduced from 100 feet to 86 feet and 8 inches;
9. Design and build half street frontage improvements on SE 140th Street per North Bend Municipal Code (NBMC) and as modified below:
 - a. SE 140th Street – the North Bend Comprehensive Plan identifies SE 140th Street as a Neighborhood Collector Street and therefore the required half street improvements shall generally comply with NBMC 19.05.020 for collector streets and the following modifications of said Section:
 - i. Two 11-foot travel lanes and a 5-foot bike lane; and
 - ii. In lieu of the required 5-foot concrete sidewalk, an 8-foot paved asphalt meandering trail, designed to match and connect to future developments on adjacent sides, and a reduction of the 6-foot planter strip to

accommodate said trail will be installed. The trail shall meander and undulate into the 6-ft planter strip by up to two feet at one location. When the trail meanders onto the Tanner Electric property, a 5-ft. access easement in favor of the public shall be provided;

10. Design and build on-site storm drainage, collection, treatment, and infiltration system with overflow connection to storm system along SE North Bend Way; and
11. Obtain all necessary permits from the City of North Bend;

B. Phase 2

1. Design and build an addition onto the existing Tanner Electric administration and operation building on the south end of the site near SE North Bend Way. New square footage will be approximately 900 square feet. An additional 3,643 square feet of existing space will be modernized to function as the Tanner Electric Operations Building. Total square footage will be increased to 4,534 square feet;
2. Design and build a new single-bay loading dock attached to building addition;
3. Modify the access gate separating the public from the secured existing Tanner Electric storage yard at the center of the site;
4. Modify on-site existing parking and storm system on the south end of the site as required by the NBMC;
5. Design and build landscape improvements along SE North Bend Way per the NBMC;
6. Design and build half street frontage improvements on SE North Bend Way per NBMC; and
7. Undergo building design review with the City Community and Economic Development Department and obtain all necessary permits from the City of North Bend.

C. Phase 3

1. Design and build a 2,582 square foot addition onto the existing 3,872 sf Tanner Electric vehicle storage building on the south end of the site near SE North Bend Way. The new 6,454 sf structure will be enclosed to form a secured garage, instead of the open front structure that currently exists.

As of the date of this Agreement, only Phase 1 has been designed and scheduled. The expected build-out time period for the entire project is (10) years, with Phase 1 expected to be complete by December 2018, Phase 2 expected to be complete by December 2022, and Phase 3 expected to be complete by December 2027.

3. Exhibits. The following exhibits, attached hereto, are incorporated herein and made part of this Agreement by this reference:

- A. Exhibit A: Project Site – Legal Description;
- B. Exhibit B: Draft Site Plan Differentiating Phase 1 from Phases 2 & 3;

C. Exhibit C: Exterior Elevations showing proposed the Phase 1 Design of Building.

4. **Effective Date and Duration.** This Agreement shall commence upon the effective date of the City Council resolution approving this Agreement (the “Effective Date”), and shall continue in force for a period of ten (10) years (the “Initial Term”) unless extended or terminated as provided herein. Following the expiration of the Initial Term or extension thereof, or if sooner terminated, this Agreement shall have no force and effect, subject however, to post-termination obligations of the Developer or Landowner.

5. **Project is a Private Undertaking.** It is agreed among the parties that the Project is a private development and that the City has no interest therein except as authorized in the exercise of its governmental functions.

6. **Agreement Binding on Future Landowners.** From time to time, as provided in this Agreement, Developer may sell or otherwise lawfully dispose of a portion of the Project Site to a person or entity (“Landowner”) who, unless otherwise released by the City, shall be subject to the applicable provisions of this Agreement related to such portion of the Project Site. Developer, and any subsequent Landowner, may free itself from further obligations relating to the sold, assigned, or transferred property, provided that the buyer, assignee, or transferee expressly assumes the obligations under this Agreement as provided herein. Notwithstanding, should construction of Phase 1 and 2 not commence prior to a sale, assignment, or conveyance, any subsequent Landowner shall not be obligated to this Agreement.

7. **Planning and Development.**

A. **Development Standards.** Except as otherwise specifically provided in this Agreement, the Project shall be completed in accordance with all development and design standards of the North Bend Municipal Code, and all applicable environmental, building, and construction codes, and regulations contained therein in effect at the time of permit submittal.

B. **Public Works—Right-of-Way Improvements Deferred.** Developer agrees to install half-street right-of-way improvements and required landscaping as shall be required by the City. Developer shall not be required to construct half-street improvements along North Bend Way until Phase 2 of the Project. The final design shall be approved by the City’s Public Works Director. Construction of right-of-way improvements shall meet all City standards and be installed before issuance of a certificate of occupancy for the Building. Upon completion, said right-of-ways will be the responsibility of the City for maintenance, repairs, and liability.

8. **Vested Rights.**

A. During the term of this Agreement, Developer is assured, and the City agrees, that the development rights, obligations, terms, and conditions specified in this Agreement, are fully vested in Developer and may not be changed or modified by the City, except as may be expressly permitted by, and in accordance with, the terms and conditions of this Agreement, including the exhibits hereto, or as expressly consented to by Developer.

B. This Development Agreement only covers those specific development standards addressed herein. The City's Development Regulations, including building, fire, public works, land use, and signage regulations shall govern unless specifically addressed in this Agreement. No vesting is created by this Agreement for any other development regulation that is not included in this Agreement. Notwithstanding the foregoing, Developer will have the full benefit of the vested rights doctrine in Washington State and will only be bound by those laws, statutes, regulations, ordinances and codes in effect at the time of permit submittal by Developer.

9. Permits Required. Developer shall obtain all permits required under the NBMC for this Project.

10. Further Discretionary Actions. Developer acknowledges that the City's land use regulations contemplate the exercise of further discretionary powers by the City. These powers include, but are not limited to, review of additional permit applications under SEPA. Nothing in this Agreement shall be construed to limit the authority or the obligation of the City to hold legally required public hearings, or to limit the discretion of the City and any of its officers or officials in complying with or applying ordinances that govern the permitted uses of land, the density and intensity of use, and the design, improvement, construction standards and specifications applicable to the development of the Project Site.

11. Existing Land Use Fees and Impact Fees.

A. Developer acknowledges and agrees that land use, building, fire, public works, and sign fees adopted by the City as of the Effective Date of this Agreement may be increased by the City from time to time, and are applicable to permits and approvals for the Project Site, as long as such fees apply to similar applications and projects in the City.

B. All impact fees shall be paid as set forth in the approved permit or approval, in accordance with Title 17 of the North Bend Municipal Code, and City will exercise reasonable efforts to explore mitigation of such fees, consistent with other applications and Projects in the City.

12. Notice of Default/Opportunity to Cure/Dispute Resolution.

A. In the event a party, acting in good faith, believes the other party has violated the terms of this Agreement, the aggrieved party shall give the alleged offending party written notice of the alleged violation by sending a detailed written statement of the alleged breach. The alleged offending party shall have thirty (30) days from receipt of written notice in which to cure the alleged breach. This notice requirement is intended to facilitate a resolution by the parties of any dispute prior to the initiation of litigation. Upon notice of an alleged breach, the parties agree to meet and agree upon a process for attempting to resolve any dispute arising out of this Agreement. A lawsuit to enforce the terms of this Agreement shall not be filed until the latter of either: (1) the end of the 30-day cure period or (2) the conclusion of any dispute resolution process.

B. After proper notice and expiration of the 30-day cure period, if the alleged default has not been cured or is not being diligently cured in the manner set forth in the notice, the aggrieved party may, at its option, institute legal proceedings in accordance with this Agreement. Additionally, the City may decide to enforce the City Code violations and obtain penalties and costs as provided in applicable provisions of the North Bend Municipal Code.

13. Amendment; Effect of Agreement on Future Actions. This Agreement may be amended by mutual consent of the parties as provided in Section 26 herein, provided that any such amendment shall follow the process established by law for the adoption of a development agreement. However, nothing in this Agreement shall prevent the City Council from making any amendment to its Comprehensive Plan, Zoning Code, Official Zoning Map, or development regulations affecting the Project Site as the City Council may deem necessary to the extent required by a serious threat to public health and safety.

14. Termination.

A. This Agreement shall expire and be of no further force and effect if Developer does not construct the Project as contemplated by the permits and approvals obtained in connection with the Project and this Agreement, or submits applications for development of the Project Site that are inconsistent with this Agreement.

B. This Agreement shall terminate either: (1) upon the expiration of the Initial Term identified in Section 4 above, or (2) when the Subject Property has been fully developed *and* all of Developer's obligations in connection therewith are satisfied as determined by the City, whichever first occurs. Upon termination of this Agreement under this Subsection 14(B), the City shall record a notice of such termination in a form satisfactory to the City Attorney.

C. This Agreement shall terminate upon Developer's abandonment of the Project. Developer shall be deemed to have abandoned the Project if all three Phases of the Project have not begun construction within 10 years of the Effective Date noted above.

15. Effect of Termination on Developer Obligations. Termination of this Agreement shall not affect any of Developer's obligations to comply with (a) the City Comprehensive Plan or any applicable zoning code(s), subdivision maps or other land use entitlements approved with respect to the Project Site; (b) any conditions or restrictions specified in this Agreement to continue after the termination of this Agreement; or (c) obligations to pay assessments, liens, fees, or taxes, unless the termination or abandonment of the Project nullifies such obligations.

16. Effect of Termination on City. Upon termination of this Agreement, the entitlements, conditions of development, limitations on fees and any other terms and conditions vested pursuant to Section 8 herein shall no longer be vested hereby with respect to the Project Site (provided that vesting of such entitlements, conditions or fees may be established for the property pursuant to then-existing planning and zoning laws).

17. Covenants Running with the Land. The conditions and covenants set forth in this Agreement and incorporated herein by the Exhibits shall run with the land, and the benefits and

burdens shall bind and inure to the benefit of the parties. Developer and every Landowner, purchaser, assignee, or transferee of an interest in the Project Site, or any portion thereof, shall be obligated and bound by the terms and conditions of this Agreement, unless the Landowner or subsequent Landowner assignee or transferee has abandoned the project and no party has started construction of the Project, and shall be the beneficiary thereof and a party thereto, but only with respect to the Project Site, or such portion thereof, sold, assigned, or transferred to it. Any such purchaser, assignee, or transferee shall observe and fully perform all of the duties and obligations of a Developer contained in this Agreement, as such duties and obligations pertain to the portion of the Project Site sold, assigned or transferred to it. A copy of the fully executed Agreement shall be recorded in accordance with Section 27 herein.

18. Specific Performance. The parties specifically agree that damages are not an adequate remedy for breach of this Agreement, and that the parties are entitled to compel specific performance of all material terms of this Agreement by any party in default hereof.

19. Third Party Legal Challenge. In the event any legal action or special proceeding is commenced by any person or entity other than a Party or a Landowner to challenge this Agreement or any provision herein, the City may elect to tender the defense of such lawsuit or individual claims in the lawsuit to Developer and/or Landowner(s). The Developer and/or Landowner shall not settle any lawsuit without the consent of the City. The City shall act in good faith and shall not unreasonably withhold consent to settle. This section shall survive the termination of this Agreement.

20. No Presumption Against Drafter. Developer represents that it has been advised to seek legal advice and counsel from its attorney concerning the legal consequences of this Agreement, that it has carefully read the foregoing Agreement, and knows the contents thereof, and signs the same as its own free act, and that it fully understands and voluntarily accepts the terms and conditions of this Agreement. Both parties have had the opportunity to have this Agreement reviewed and revised by legal counsel, and the parties agree that no presumption or rule that ambiguity shall be construed against the drafting party shall apply to the interpretation or enforcement of this Agreement.

21. Notices. Notices, demands, or correspondence to the City and Developer shall be sufficiently given if dispatched by prepaid first-class mail to the following addresses:

TO CITY: City Administrator
 City of North Bend
 P.O. Box 896
 North Bend, WA 98045

TO DEVELOPER: Steven W. Walter, General Manager
 Tanner Electric Cooperative
 45710 SE North Bend Way
 North Bend, WA 98045

Notice to the City shall be to the attention of both the City Administrator and the City Attorney. Notices to subsequent Landowners shall be required to be given by the City only for those Landowners who have given the City written notice of their address for such notice. The parties hereto may, from time to time, advise the other of new addresses for such notices, demands, or correspondence.

22. Assignment. This Agreement shall be binding and inure to the benefit of the parties. Developer shall not assign its rights under this Agreement without the written consent of the City, which consent shall not unreasonably be withheld.

23. Governing Law and Venue. This Agreement shall be construed and enforced in accordance with the laws of the State of Washington. Venue for any action shall lie in King County Superior Court.

24. Attorneys' Fees. In the event of any litigation or dispute resolution process between the parties regarding an alleged breach of this Agreement, the prevailing Party shall be entitled to an award of its costs, attorneys' fees, and expert witness fees.

25. Severability. The provisions of this Agreement are separate and severable. The invalidity of any clause, sentence, paragraph, subdivision, section, or portion or the invalidity of the application thereof to any person or circumstance, shall not affect the validity of the remainder of this Agreement, or the validity of its application to other persons or circumstances.

26. Entire Agreement. This Agreement contains the entire agreement between the parties hereto, and no other agreements, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or bind any of the parties hereto. Changes made in accordance with Section 13 herein shall be incorporated by written amendments or addenda signed by both parties and recorded pursuant to Section 27, below.

27. Recording. Developer shall record an executed copy of this Agreement with the King County Auditor, pursuant to RCW 36.70B.190, no later than fourteen (14) days after the Effective Date and shall provide the City with a conformed copy of the recorded document within thirty (30) days of the Effective Date.

By their signatures below, the persons executing this Agreement each represent and warrant that they have full power and authority to bind their respective organizations, and that such organizations have full power and actual authority to enter into this Agreement and to carry out all actions required of them by this Agreement.

CITY OF NORTH BEND

TANNER ELECTRIC COOPERATIVE

By: _____
Kenneth G. Hearing, Mayor

By: _____
Steven W. Walter, General Manager

Attest/Authenticated:

Susie Oppedal, City Clerk

Approved As To Form:

Michael R. Kenyon, City Attorney

**** remainder of page intentionally left blank ****

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

On this ____ day of _____, 2018, Mayor Kenneth Hearing personally appeared before me, the undersigned Notary Public in and for the State of Washington, who is known to me or produced satisfactory evidence that he is the Mayor of the City of North Bend, the municipal corporation that executed the foregoing Development Agreement, and acknowledged such instrument in his capacity as the Mayor of the City of North Bend and that he signed the Agreement as the free and voluntary act of such municipal corporation for the uses and purposes mentioned therein, and on oath stated that he was duly authorized to execute such instrument.

GIVEN under my hand and official seal this ____ day of _____, 2018.

Print name: _____

NOTARY PUBLIC in and for the State of
Washington, residing at _____

Commission expires: _____

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

On this ____ day of _____, 2018, personally appeared before me, the undersigned Notary Public in and for the State of Washington, Steven W. Walter, who is known to me or produced satisfactory evidence that s/he is the General Manager of the Tanner Electric Cooperative that executed the foregoing Development Agreement, and acknowledged that s/he signed the Agreement as the free and voluntary act of such entity for the uses and purposes mentioned therein, and on oath stated that he was duly authorized to execute such instrument.

GIVEN under my hand and official seal this ____ day of _____, 2018.

Print name: _____

NOTARY PUBLIC in and for the State of
Washington, residing at _____

Commission expires: _____

EXHIBIT A:

PROJECT SITE – LEGAL DESCRIPTION

Parcel No. 1323089098

THAT PORTION OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 13, TOWNSHIP 23 NORTH, RANGE 8 EAST, W.M., IN KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE NORTHERLY LINE OF PRIMARY STATE HIGHWAY NO. 2 WHICH IS SOUTH 68°00'00" EAST 381.05 FEET, AS MEASURED ALONG SAID NORTHERLY LINE, FROM ITS INTERSECTION WITH THE WEST LINE OF SAID SUBDIVISION;

THENCE CONTINUING SOUTH 68°00'00" EAST 140 FEET;

THENCE NORTH 22°00'00" EAST 76.71 FEET;

THENCE NORTH 3°28'00" WEST PARALLEL WITH THE WEST LINE OF SAID SUBDIVISION TO THE SOUTH LINE OF CAVANAUGH MIDDLE FORK ROAD;

THENCE WESTERLY ALONG SAID SOUTH LINE TO A LINE 140 FEET WESTERLY OF AND PARALLEL WITH THE ABOVE DESCRIBED LINE WHICH BEARS NORTH 3°28'00" WEST;

THENCE SOUTH 3°28'00" EAST ALONG SAID PARALLEL LINE TO A POINT WHICH BEARS NORTH 22°00'00" EAST FROM THE POINT OF BEGINNING;

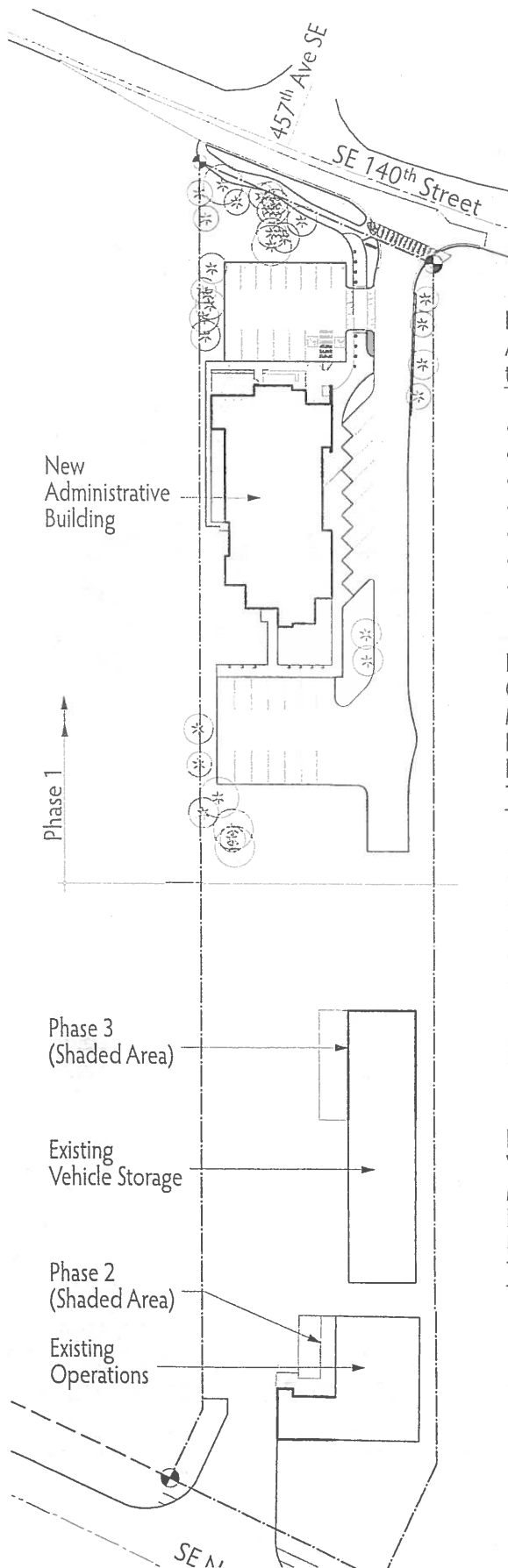
THENCE SOUTH 22°00'00" WEST 45.07 FEET TO THE POINT OF BEGINNING.

EXCEPT COAL AND MINERALS AND THE RIGHT TO EXPLORE FOR AND MINE THE SAME.

EXHIBIT B: Site Plan Indicating Phase 1 from 2 & 3



0 50' 100' 200'



Phase 1

Administration Building
total square footage = 8,890 sf

- New building on undeveloped site
- Improvements to SE 140th
- Parking & storm system
- Required landscaping
- New generator
- Improve up to existing storage yard
- Revise storage yard fencing

Phase 2

Operations Building
Modernization & addition to existing structure
Existing square footage = 3,634 sf
New square footage = 900 sf
Total square footage = 4,534 sf

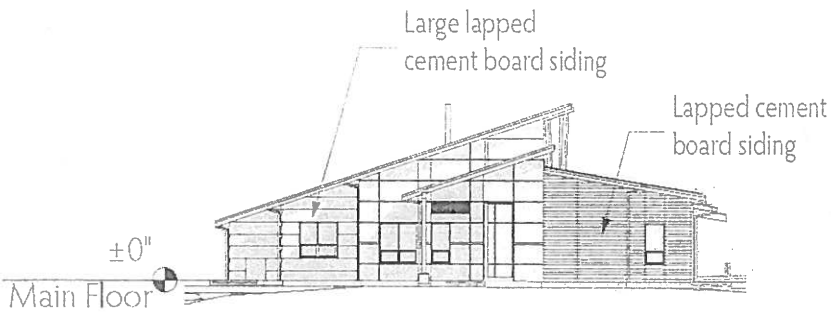
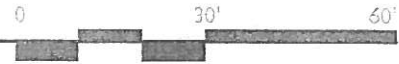
- Modify existing building to house operations
- Improvements to SE North Bend Way
- Modify parking & storm system
- Remove second floor structure
- Modify roof eaves
- Add covered porch areas
- Add loading dock
- Modify access gate
- Required landscaping

Phase 3

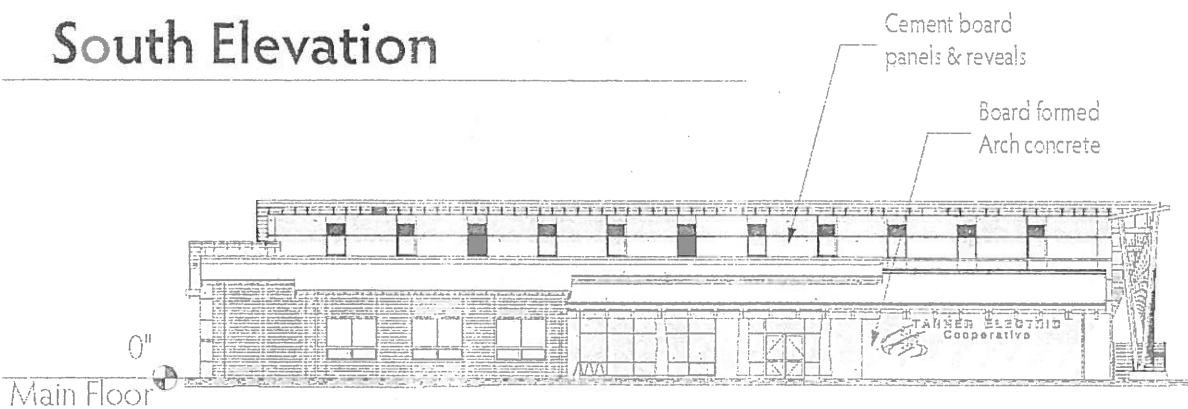
Vehicle Storage Building
Modernization & addition to existing structure
Existing square footage = 3,872 sf
New square footage = 2,580 sf
Total square footage = 6,452 sf

- New building next to existing vehicle storage
- Add overhead doors to existing structure
- Add internal trench drain to existing structure
- New vehicle wash apron
- New covered breezeway between buildings

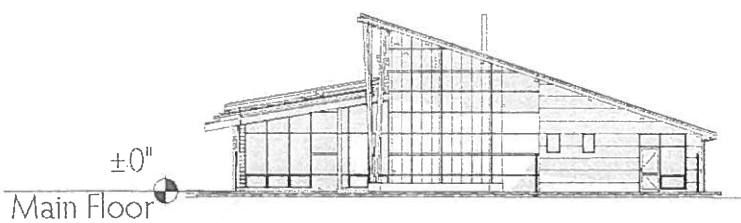
Exhibit C: Exterior Elevations Phase 1



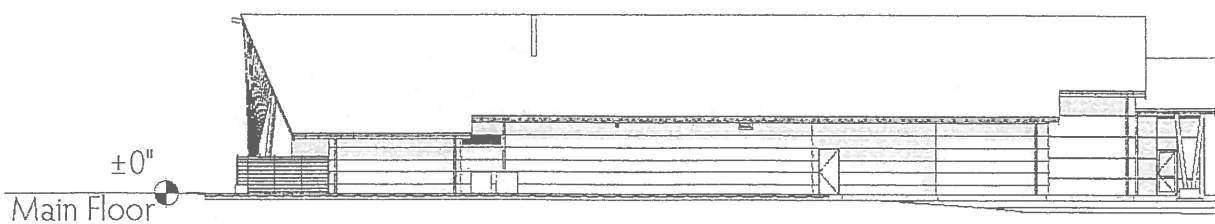
South Elevation



East Elevation



North Elevation



West Elevation

Agenda Item 6-7

✓ - of met. class A



DATE: January 2, 2018
TO: Planning Commission
FROM: Lynn Hyde, Economic Development Manager and Planner
SUBJECT: NBMC 19.05 Street Standards Amendments addressing Park Street

Planning Commission,

Attached are proposed street standards specific to Park Street (from Bendigo/SR202 intersection to North Bend Way intersection). We are beginning to see proposals to redevelop properties along Park Street. With redevelopment we will see improvements to our streets. Park Street is currently classified as a collector street. Because of the increased traffic we are seeing as users are traveling on Park Street as an alternative to downtown, and the expected increase in traffic once the roundabout at North Bend Way and Park Street/Downing is constructed, city staff believes we need to take a closer look at exactly what the street sections should be on Park Street.

Park Street has been broken up into three different sections because of the existing built conditions and adjacent users:

1. Bendigo to Main Street: The adjacent users are commercial therefore wide sidewalks are important. There will be a high volume of west bound cars turning left (or south) onto Bendigo, therefore a turning lane is necessary to keep traffic flowing. There is also on street parking provided on the north side of the road to serve the commercial buildings. This is consistent with what was recently constructed.
2. Main Street to Cedar Ave S: This portion also has adjacent commercial users and we would like to see wider sidewalks were possible. In addition, there will be higher volumes of traffic turning therefore we are recommending the 12-foot turn lane. Staff believes bikes lanes are important up to Main Street intersection and are recommended for this section.
3. Cedar Ave S to North Bend Way: This portion of Park Street has primarily residential users adjacent. There are driveways but not main roads intersecting. Therefore, staff recommends removing the 12-foot turn lane and including on street parking at 7.5-feet on either side to serve the residential users.

During discussions some of the items city staff feel are important (not prioritized):

- Flow of traffic (this will be a street used to bypass downtown and we anticipate added traffic volumes). Therefore, staff is recommending two 11-foot travel lanes with a 12-turn lane when needed.
- Pedestrian use: This street is in our downtown commercial core and allows business and multifamily users. We anticipate higher levels of foot traffic and want to encourage pedestrian safety. Therefore, staff is recommending the widest sidewalks possible working within existing conditions (existing buildings that will likely not redevelop).
- Bicyclist: We are seeing more and more cyclists using our streets. In addition, this will be one of the main roads connecting communities, destinations and parks. City staff is proposing a 5-foot

Community and Economic Development Department
126 E. 4th St, North Bend WA, 98045
Tel: 425.888.5633 / Fax: 425.888.5636



bike lane for the majority of the length of Park Street. The bike lanes do not extend past Main however because there is not enough right of way width, and staff anticipates cyclists will either be merging with traffic to turn left and head south at Bendigo, or take a right on Main to head north. More experienced and comfortable cyclists may merge with traffic at this point to take a right or a left.

- Street trees: staff has proposed a recommended tree species and treatment per the recommendation of our arborist. While we do believe that one species should be used for the entirety of the street, we understand unforeseen circumstances may arise, and have left the ability for the director to make the final decision.

City Staff recommends the attached street standards.

Sincerely,

Lynn Hyde
Economic Development Manager & Planner
City of North Bend
Phone: 425-888-7646

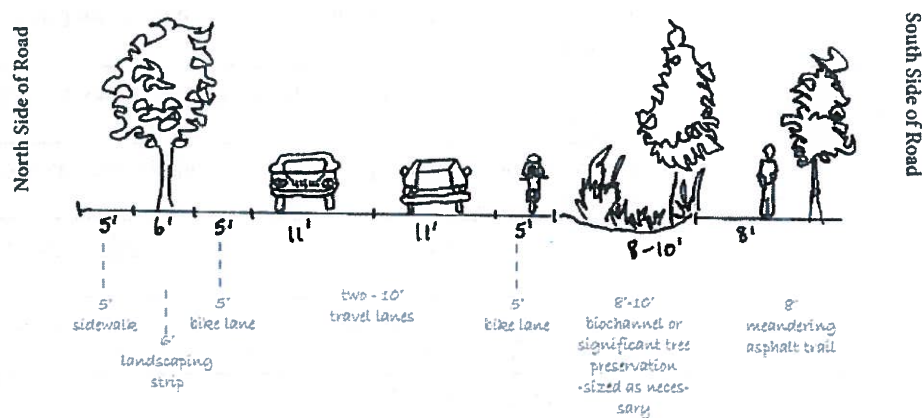
F. Collector Streets.

Due to the unique mix of zones and transitional landscape areas the collector street design for SE 140th St shall be adjusted to comply with the following street cross section below Table F.

Right-of-Way Width	60 feet minimum.
Paved Roadway Width Inside Curbs	38 feet: two eight-foot parking lanes and two 11-foot travel lanes.
Sub-Grade	Prepared per Section 2-06 of WSDOT Standard Specifications.
Ballast	Based on engineering and geotechnical recommendations, six-inch minimum.
Crushed Surfacing Base Course	Based on engineering and geotechnical recommendations, four-inch minimum.
Crushed Surfacing Top Course	Based on engineering and geotechnical recommendations, two-inch minimum.
Paving Course	Based on engineering and geotechnical recommendations, four-inch HMA minimum.
Cement Concrete Traffic Curb and Gutter	Per North Bend Standard Plans 1 and 1a, except as when best available low-impact development techniques used as approved by city.
Landscape Strip	Six-foot minimum width on both sides of the street. Landscaping requirements found under Chapter 18.18 NBMC.
Sidewalk and ADA Ramps	Five-foot minimum sidewalk width on both sides of the street. Per North Bend Standard Plan 2 for Sidewalks and North Bend Standard Plans 3, 4, 5, 6, 7, and 8 for ADA ramps.
Driveway and Alley Returns	Per North Bend Standard Plans 9 and 9a.
Curb Radii	35 feet.

1. SE 140th Street from North Bend Way to Middle Fork Rd intersection.

**Street Design Sections for SE 140th
with five foot bike lanes**



2. Park Street (Bendigo/SR 202 to Main Street intersection)

<u>Right-of-Way Width</u>	<u>61 feet minimum.</u>
---------------------------	-------------------------

<u>Paved Roadway Width Inside Curbs</u>	<u>41.5 feet: one 7.5-foot parking lane, two 11-foot travel lanes, one 12-foot turn lane.</u>
<u>Sub-Grade</u>	<u>Prepared per Section 2-06 of WSDOT Standard Specifications.</u>
<u>Ballast</u>	<u>Based on engineering and geotechnical recommendations, six-inch minimum.</u>
<u>Crushed Surfacing Base Course</u>	<u>Based on engineering and geotechnical recommendations, four-inch minimum.</u>
<u>Crushed Surfacing Top Course</u>	<u>Based on engineering and geotechnical recommendations, two-inch minimum.</u>
<u>Paving Course</u>	<u>Based on engineering and geotechnical recommendations, four-inch HMA minimum.</u>
<u>Cement Concrete Traffic Curb and Gutter</u>	<u>Per North Bend Standard Plans 1 and 1a, except when best available low-impact development techniques used as approved by city.</u>
<u>Sidewalk, Street Trees, Tree Grates, and ADA Ramps</u>	<u>13-foot minimum sidewalk width on South side of Park Street, 6.5-foot minimum sidewalk width on North side of Park Street.</u> <u>Street tree species shall be Persian Ironwood, <i>Parrotia Persica</i> cv, or as otherwise approved by the CED Director and planted pursuant to Chapter 18.18 NBMC. Tree pits shall be minimum of four feet by five feet (larger when space is available) and should use rock dust for fill or other approved material.</u> <u>Per North Bend Standard Plan 2 for Sidewalks and North Bend Standard Plans 3, 4, 5, 6, 7, and 8 for ADA ramps.</u>
<u>Driveway and Alley Returns</u>	<u>Per North Bend Standard Plans 9 and 9a.</u>
<u>Curb Radii</u>	<u>35 feet.</u>

3. Park Street (Main Street intersection to Cedar Ave S intersection)

<u>Right-of-Way Width</u>	<u>60 feet minimum.</u>
<u>Paved Roadway Width Inside Curbs</u>	<u>44 feet: two 5-foot bike lanes on both sides, two 11-foot travel lanes, one 12-foot turn lane.</u>
<u>Sub-Grade</u>	<u>Prepared per Section 2-06 of WSDOT Standard Specifications.</u>
<u>Ballast</u>	<u>Based on engineering and geotechnical recommendations, six-inch minimum.</u>
<u>Crushed Surfacing Base Course</u>	<u>Based on engineering and geotechnical recommendations, four-inch minimum.</u>
<u>Crushed Surfacing Top Course</u>	<u>Based on engineering and geotechnical recommendations, two-inch minimum.</u>
<u>Paving Course</u>	<u>Based on engineering and geotechnical recommendations, four-inch HMA minimum.</u>
<u>Cement Concrete Traffic Curb and Gutter</u>	<u>Per North Bend Standard Plans 1 and 1a, except when best available low-impact development techniques used as approved by city.</u>
<u>Sidewalk, Street Trees, Tree Grates, and ADA Ramps</u>	<u>8-foot minimum sidewalk width on both sides. Where right of way exceeds 60-feet, sidewalks shall be wider with a maximum of 15-feet.</u> <u>Street tree species shall be Persian Ironwood, <i>Parrotia Persica</i> cv, or as otherwise approved by the CED Director and planted pursuant to Chapter 18.18 NBMC. Tree pits shall be minimum of four feet by five</u>

	<u>feet (larger when space is available) and should use rock dust for fill or other approved material.</u> <u>Per North Bend Standard Plan 2 for Sidewalks and North Bend Standard Plans 3, 4, 5, 6, 7, and 8 for ADA ramps.</u>
<u>Driveway and Alley Returns</u>	<u>Per North Bend Standard Plans 9 and 9a.</u>
<u>Curb Radii</u>	<u>35 feet.</u>

4. Park Street (Cedar Ave S intersection to North Bend Way/Downing intersection)

<u>Right-of-Way Width</u>	<u>63 feet minimum.</u>
<u>Paved Roadway Width Inside Curbs</u>	<u>32 feet: two 11-foot travel lanes, two 5-foot bike lanes, two 7.5-foot parking lanes.</u>
<u>Sub-Grade</u>	<u>Prepared per Section 2-06 of WSDOT Standard Specifications.</u>
<u>Ballast</u>	<u>Based on engineering and geotechnical recommendations, six-inch minimum.</u>
<u>Crushed Surfacing Base Course</u>	<u>Based on engineering and geotechnical recommendations, four-inch minimum.</u>
<u>Crushed Surfacing Top Course</u>	<u>Based on engineering and geotechnical recommendations, two-inch minimum.</u>
<u>Paving Course</u>	<u>Based on engineering and geotechnical recommendations, four-inch HMA minimum.</u>
<u>Cement Concrete Traffic Curb and Gutter</u>	<u>Per North Bend Standard Plans 1 and 1a, except when best available low-impact development techniques used as approved by city.</u>
<u>Sidewalk, Street Trees, Tree Grates, and ADA Ramps</u>	<u>8-foot minimum sidewalk width on both sides. Where right of way exceeds 63-feet, sidewalks shall be wider with a maximum of 15-feet.</u> <u>Street tree species shall be Persian Ironwood, <i>Parrotia Persica</i> cv, or as otherwise approved by the CED Director and planted pursuant to Chapter 18.18 NBMC. Tree pits shall be minimum of four feet by five feet (larger when space is available) and should use rock dust for fill or other approved material.</u> <u>Per North Bend Standard Plan 2 for Sidewalks and North Bend Standard Plans 3, 4, 5, 6, 7, and 8 for ADA ramps.</u>
<u>Driveway and Alley Returns</u>	<u>Per North Bend Standard Plans 9 and 9a.</u>
<u>Curb Radii</u>	<u>35 feet.</u>

Agenda Item 8

3 not abrupt

MEMORANDUM

505 Fifth Avenue S, Suite 300, Seattle, WA 98104 | P 206.436.0515

To: Tom Mohr, PE, Deputy Public Works Director
Mark Rigos, PE, Public Works Director

From: Mike Hendrix, PE, PTOE
Kern McGee, EIT

Date: November 22, 2017

Re: North Bend Full Build-Out Traffic Impact Analysis

INTRODUCTION

The City of North Bend anticipates the build-out of many development projects between 2017 and 2023. In addition, several traffic improvements from the City's Transportation Improvement Program (TIP) will come online in the same timeframe. The City also anticipates significant population growth resulting in a population of 14,401 people by 2035. This technical memorandum report documents the analysis or the impacts of a full build-out scenario combining upcoming development, long term population growth, and traffic alterations. Improvement projects to maintain the City's level of service concurrence standard will be recommended for the City's future TIPs in light of this analysis.

METHODOLOGY

A Synchro 9 traffic model was developed to compute the LOS at each study intersection. Synchro 9 is software developed by Trafficware that applies Highway Capacity Manual (HCM) intersection analysis calculations with user-defined geometry, volumes, and signal timing information.

The HCM defines level of service differently based on which control type applies to the intersection. In each case, LOS ranges from A (least delay) to F (most delay). For signalized, all-way stop controlled (AWSC), and roundabout intersections, the performance metric is a function of the average delay for all vehicles that travel through the intersection. At two-way stop controlled (TWSC) locations, approach LOS is defined for minor-street or left-turn movements; vehicles that travel freely are assumed to experience zero or negligible delay. Table 1 summarizes level of service ranges based on intersection control type.

Table 1. Level of Service Criteria.

Level of Service	Average Control Delay (seconds/vehicle)	
	Signalized/AWSC/Roundabout (All Approaches)	Unsignalized (Worst Stop-Controlled Movement)
A	≤ 10	≤ 10
B	10-20	10-15
C	20-35	15-25
D	35-55	25-35
E	55-80	35-50
F	≥ 80	≥ 50

MEMORANDUM

The traffic model for this study was drawn over an aerial map of the City to capture roadway curvature, intersection spacing, lane configurations, and turn-lane storage lengths. Existing volumes were taken from turning movement counts performed at each intersection during the PM peak hour (4:00pm to 6:00pm) by the developers whose facilities are considered in the report.

The following locations were analyzed for existing and future level of service:

Signalized

- E Park Street and Bendigo Boulevard
- North Bend Way and Bendigo Boulevard
- North Bend Way and Ballarat Avenue (2023 and 2035 analyses only)

Unsignalized

- North Bend Way and Main Avenue
- North Bend Way, Downing Avenue, and Park Street
- Cedar Falls Way and Maloney Grove
- Cedar Falls Way and 432nd Avenue
- Cedar Falls Way and 436th Avenue
- North Bend Way and 436th Avenue
- North Bend Way and SE 140th Street
- SE 140th Street, SE Middle Fork Road, 468th Avenue SE
- SE 136th Street and 436th Avenue SE
- SE 144th Street and 468th Avenue SE
- North Bend Way and Ballarat Avenue (2017 analysis only)

Traffic counts from the following developers (and complex name) were considered in the analysis:

- Westpac Development (Maloney Grove 13) – 13 Lot Plat
- John Day Homes (Tanner Falls) – 48 Lot Plat
- Segale Properties – 156 Lot Plat
- John Day Homes (Miner's Ridge) – 24 Lot Plat
- Snoqualmie Valley Athletic Center - Commercial
- Chinook Lumber - Commercial
- North Bend Associates (River Run) – 136 unit apartments and townhomes
- Quadrant Homes (Cedar Landing) – 141 Lot Plat
- Pulte Homes (River Glen) – 108 Lot Plat
- John Day Homes (Cottages at Ranger Station) – 55 Lot Plat
- Downtown Plaza Experience – CIP project currently under construction on North Bend Way

Improvements from the 6-year TIP that impacted the analysis:

- Northbound right turn lane at Bendigo Boulevard and E Park Street
- Conversion of on-street parking along NB Bendigo Boulevard north of North Bend Way to a travel lane
- Removal of left turn lanes from Main Avenue at North Bend Way

MEMORANDUM

Improvements from the 6-year TIP that impacted the analysis (cont'd):

- Improvement of the "Nintendo bypass" via S Fork Avenue SW
- Installation of a traffic signal at North Bend Way and Ballarat Avenue
- Roundabout at North Bend Way, Downing Avenue, and Park Street
- Roundabout at North Bend Way and 436th Avenue SE
- Roundabout at North Bend Way and SE 140th Street
- Roundabout at the intersection of SE 140th Street, SE Middle Fork Road, and 468th Avenue SE

Since the traffic counts were conducted between 2013 and 2016, a background growth percentage was applied to establish a 2017 "existing" scenario. To determine this rate, three sources of data were used as a basis. A review of King County and Washington State Department of Transportation (WSDOT) traffic data for the North Bend area, including local roads I-90, SR 18, and SR 202, result in growth rates between -6% and 30%. The average for these roadways is in the vicinity of 3.5% annual traffic growth rate. The Puget Sound Regional Council (PSRC) projects that North Bend will have a population growth of 3.58% annually until 2025 when the population will level out. The City of North Bend anticipates that the City will be fully-built out by 2035 based on current zoning. To reach the PSRC's population target of 14,401 persons, a population annual growth rate of 3.96% is required. In most cases, population and traffic growth are relatively independent of each other. This is primarily due to the various modes of transportation available in urban areas, such as transit. However, due to the relatively low amount of transit and the nature of North Bend as a suburban community, this study assumed that the population and traffic volumes will grow similarly.

This report gives the existing case for each intersection based on the City's 3.96% growth number. A 2023 full build-out model was calculated by adding new demand forecasted by the developments listed above to a background 3.5% growth rate. The year 2023 was chosen to capture all projects included in the City's 6-year TIP beginning in 2017. Finally, 2017 traffic volumes were projected out to 2035 using the City's 3.96% population growth rate. Thus, three conditions are explored, 2017, 2023, and 2035.

The intersections that are projected to perform at LOS E or F receive further treatment below.

Existing Conditions

The existing model uses traffic counts taken between 2013 and 2016, then extrapolates to 2017 using a 3.96% growth rate. The current level of service for the studied intersections can be seen in Table 2.

MEMORANDUM

Table 2. Existing Delay (2017).

PM Peak Hour Scenario	Control Delay (s/veh)					LOS
	EB	WB	NB	SB	Overall	
140th Street, Middle Fork Road, 468th Avenue	5.7	n/a	0	9.9	6.1	A
North Bend Way and 140th Street	3.6	0	n/a	9.5	4.5	A
Cedar Falls Way and 436th Avenue	12.1	n/a	3.1	0	4.8	B
Cedar Falls Way and 432nd Avenue	0.1	0.8	12.5	11.6	2.1	B
Cedar Falls Way and Maloney Grove	0	0.6	13.9	12.8	1.8	B
North Bend Way and 436th Avenue	0	1.9	21.7	n/a	7.4	C
North Bend Way and Ballarat Avenue	1.7	0.3	30.6	60.1	8.4	F
North Bend Way and Bendigo Boulevard	83.7	50.9	74.8	96.3	77.0	E
North Bend Way and Main Avenue	0.3	1.3	21.9	37.5	2.9	E
North Bend Way and Park Street	0.5	2.2	74.9	719.1	38.5	F
Park Street and Bendigo Boulevard	12.2	19.8	24.7	13.9	18.8	C
436 th Avenue SE and SE 136 th Street	17.1	14.3	0.3	0.5	1.1	C

Note: EB = eastbound, WB = westbound, NB = northbound, SB = southbound

Four intersections currently operate below the City's LOS standard of LOS D. These intersections are located in the downtown area of North Bend along North Bend Way between Bendigo Boulevard and Park Street.

2023 Full Build-out Scenario

The 2023 Full Build-Out scenario adds the new traffic demand forecasted for each pipeline development and a background growth rate of 3.5%. In addition, all 6-year TIP projects are incorporated into the traffic model. The resulting LOS calculations are found in Table 3.

Table 3. Projected Delay with Planned Improvements and Pipeline Developments (2023).

PM Peak Hour Scenario	Control Delay (s/veh)					LOS
	EB	WB	NB	SB	Overall	
140th Street, Middle Fork Road, 468th Avenue	4.5	n/a	4.5	4.9	4.6	A
North Bend Way and 140th Street	5.7	5.2	n/a	5.7	5.6	A
Cedar Falls Way and 436th Avenue	15.5	n/a	3.4	0	5.9	C
Cedar Falls Way and 432nd Avenue	0.2	0.9	14.4	12.7	2.6	B
Cedar Falls Way and Maloney Grove	0	0.6	16.5	13.4	2.3	C
North Bend Way and 436th Avenue	9.1	10.2	11.2	n/a	10.2	B
North Bend Way and Ballarat Avenue	19.4	12.7	14.7	17.2	16.9	B
North Bend Way and Bendigo Boulevard	173.2	91.5	206.0	175.0	163.5	F
North Bend Way and Main Avenue	0.3	1.4	52.1	125.6	7.1	F
North Bend Way and Park Street*	81.0	45.5	49.9	12.6	58.6	F
Park Street and Bendigo Boulevard	9.6	17.7	16.9	17.4	17.2	B

Note: EB = eastbound, WB = westbound, NB = northbound, SB = southbound

* This level of service and delay is further reviewed for the 2035 horizon year. See discussion below for the expected operation of the roundabout based on existing conditions. It is expected that the roundabout will operate at a LOS D or better in 2023.

MEMORANDUM

Three intersections in this full build-out scenario operate at LOS E or lower. These include three of the four intersections which are currently exceeding LOS standards in the existing condition. This analysis assumes a traffic signal is built at North Bend Way and Ballarat Avenue. This results in an increase of LOS to LOS B and meets the City's concurrency standard. Note that operations the intersection of North Bend Way and Ballarat Avenue has been reviewed for revisions including an all-way stop installation. Although, the 2023 analysis assumes a traffic signal, an all-way stop may be considered in the interim to enhance access and safety at this intersection. Documentation of this analysis is provided in the appendix. Both options are shown in Table 3.

The construction of a roundabout at North Bend Way and Park Street is part of an effort to reduce through traffic in downtown North Bend. The roundabout, in conjunction with the existing signal at Bendigo Boulevard and Park Street, allows through traffic to bypass downtown and help increase the level of service in the downtown area. A separate downtown model was developed assuming a percentage of traffic will reroute away from downtown. Using existing traffic volumes, it was determined that during the PM peak hour, 23% of eastbound and 13.5% of westbound traffic would be diverted to this route. In addition, the Nintendo bypass was assumed to divert 19% of northbound traffic on Bendigo Boulevard and 82% of eastbound traffic on North Bend Way. Intersections which would be impacted by these diversions were reanalyzed to determine the level of service. The results are shown in Table 4. Additional analysis was done for the proposed roundabout at North Bend Way and Park Street/Downing Avenue to ensure that the current design effort will provide an intersection design capable of accommodating the proposed future volumes. This is described below.

Table 4. Projected Delay with Park Street Diversion (2023).

PM Peak Hour Scenario	Control Delay (s/veh)					LOS
	EB	WB	NB	SB	Overall	
North Bend Way and Ballarat Avenue	15.0	10.9	14.7	17.3	14.0	B
North Bend Way and Bendigo Boulevard	117.6	71.0	133.6	100.3	106.7	F
North Bend Way and Main Avenue	0.3	1.3	37.3	84.8	5.4	F
North Bend Way and Park Street	41.5	45.7	78.8	12.6	50.1	F
Park Street and Bendigo Boulevard	7.7	16.8	32.9	19.3	25.2	C

Note: EB = eastbound, WB = westbound, NB = northbound, SB = southbound

North Bend Way and Park Street/Downing Avenue Roundabout

The City of North Bend's consultant is currently designing the roundabout at North Bend Way and Park Street/Downing Avenue. The traffic report conducted by Reid Middleton to justify the design parameters of the roundabout indicated that a single-lane roundabout would be sufficient to accommodate the existing vehicles. A further, in-depth analysis of the intersection was conducted to determine whether the intersection configuration proposed by Reid Middleton would be sufficient.

Pertee reviewed operations of the proposed intersection in 2035 using Sidra. The Sidra analysis tool is better suited for roundabouts.

The initial traffic study conducted by Reid Middleton indicated that while traffic volumes are expected to increase in the future, intersections on either side of the roundabout (North Bend Way and Bendigo Blvd and North Bend Way and Cedar Falls Way) are expected to meter traffic entering this intersection. The intersection of North Bend Way and Cedar Falls Way is not included in this study, however, the intersection of North Bend Way and Bendigo Blvd was reviewed. The analysis indicated that 401 vehicles intending to travel through the intersection could not

MEMORANDUM

make it through the intersection during the PM peak hour. Since initial 2035 traffic volumes for the North Bend Way and Park Street/Downing Avenue intersection increased traffic based on both traffic projections from developer produced reports and a percentage, the volume is the expected demand volume.

Using this information, the analysis was revised using three approaches as described below:

1. Simple removal of 401 vehicles from the eastbound approach of the intersection. The turning movements were calculated by using the existing turning vehicle percentages. This scenario is called 2035 – Raw Vehicle Reduction.
2. Reduction of the eastbound approach by 36%. This is the percentage of demand at the Bendigo Blvd intersection that went unserved. This scenario is called 2035 – Percentage Reduction
3. Reduction of the eastbound approach by 10%. This scenario was meant to reflect that changes in conditions such as an intersection improvement at the Bendigo intersection increasing the traffic volume throughput. This scenario is called 2035 – 10% Volume Reduction.

Of the three scenarios, the second scenario, or 2035 – Percentage Reduction, is likely to represent operations at the intersection assuming no improvements to the North Bend Way and Bendigo Blvd intersection. This is because some of the traffic which is unserved at the intersection with Bendigo Blvd may be traffic which uses Main Avenue or Ballarat Avenue to access other businesses or residences in the area. The results of the analysis are shown in Table 5 below.

Table 5. Roundabout at Park Street/Downing Avenue with Vehicle Reductions.

PM Peak Hour Scenario	Control Delay (s/veh)					LOS
	EB	WB	NB	SB	Overall	
2035 – Project Volumes	81.0	5.3	76.8	18.7	46.0	E
2035 – Raw Vehicle Reduction	8.5	3.9	13.4	18.7	7.5	A
2035 – Percentage Reduction	12.8	4.4	23.0	18.7	10.8	B
2035 – 10% Volume Reduction	7.6	5.1	10.0	18.7	7.3	A

Note: EB = eastbound, WB = westbound, NB = northbound, SB = southbound

As shown above, even the reduction of 10% of vehicles on the eastbound approach would result in a substantial reduction in delay. This indicates that the reduction of volumes on the eastbound approach can result in a better intersection operation. Note that this analysis did not account for any diversion traffic as discussed above.

In addition to the roundabout installation occurring at the intersection, a center raised median will be installed along North Bend Way between the roundabout at Cedar Falls Way and the new roundabout at Park Street/Downing Avenue. This will require traffic from side streets and driveways that makes a left turn today to instead turn right and then use the roundabout to make a u-turn. This element is expected to increase the overall safety of this roadway segment.

To determine the impact of this median on the operation of the intersection, 100 u-turn movements were added to the 2035 scenarios. This value was chosen based on observations included in Reid Middleton's analysis of the roundabout at North Bend Way and Park Street/Downing Avenue. During the peak hour, 99 vehicles were observed exiting and turning left from the two driveways at QFC. This is the traffic volume which would directly impact the roundabout at Park Street/Downing Avenue.

MEMORANDUM

A summary of the impact of these vehicles is shown in Table 6.

Table 6. Roundabout at Park Street/Downing Avenue with Additional U-Turns.

PM Peak Hour Scenario	Control Delay (s/veh)					LOS
	EB	WB	NB	SB	Overall	
2035 – Raw Vehicle Reduction	12.3	24.5	18.6	24.3	20.6	C
2035 – Percentage Reduction	21.3	30.1	36.4	23.1	28.5	D
2035 – 10% Volume Reduction	9.8	36.9	13.2	21.9	26.3	D

Note: EB = eastbound, WB = westbound, NB = northbound, SB = southbound

It is conservative to use Scenario 2 as the likely result of the level of service analysis in 2035.

2035 Final Population Scenario

The final population model is based on City of North Bend growing from 6,127 people in 2014 (PSRC data) to 14,401 in 2035. Traffic volumes were assumed to grow at the same rate as the population or 3.96% annually. The intersections were evaluated for the conditions in 2035. The projected delays and level of service can be found in Table 7 below. Note that these intersections were analyzed using the improvements proposed to be constructed by 2023.

Table 7. Final Population (2035).

PM Peak Hour Scenario	Control Delay (s/veh)					LOS
	EB	WB	NB	SB	Overall	
140th Street, Middle Fork Road, 468th Avenue	5.3	n/a	5.3	6.0	5.6	A
North Bend Way and 140th Street	11.8	6.6	n/a	7.8	9.3	A
Cedar Falls Way and 436th Avenue	197.2	n/a	3.6	0	53.3	F
Cedar Falls Way and 432nd Avenue	0.2	0.9	30.7	19.4	4.6	D
Cedar Falls Way and Maloney Grove	0.1	0.7	54.4	24.8	6.3	F
North Bend Way and 436th Avenue	14.8	22.3	22.9	n/a	19.6	C
North Bend Way and Ballarat Avenue	26.8	11.8	29.3	44.5	24.4	C
North Bend Way and Bendigo Boulevard	304.1	199.0	319.0	384.3	305.5	F
North Bend Way and Main Avenue	0.3	2.3	>100	>100	2.9	F
North Bend Way and Park Street*	21.3	30.1	36.4	23.1	28.5	D
Park Street and Bendigo Boulevard	11.2	65.0	42.8	73.8	56.8	E
436th Avenue SE and SE 136th Street	93.6	71.1	0.4	0.6	4.1	F
468th Avenue SE and SE 144th Street	n/a	10.5	0	0.4	3.1	B

Note: EB = eastbound, WB = westbound, NB = northbound, SB = southbound

* Information shown for this intersection is based on Scenario 2 with 100 EB U-Turns as described above

436th Avenue Cross Section

In addition to the intersection review, the roadway segment of 436th Avenue SE between North Bend Way and I-90 was also reviewed. The City expressed concerns that the existing cross section of 436th Avenue SE may need

MEMORANDUM

to be expanded to 4-lanes in the future to accommodate future growth. A brief analysis for this scenario was conducted.

Based on recent traffic counts, 436th Avenue SE carries just under 8,000 vehicles per day. This was calculated assuming the peak hour traffic is roughly 10% of the total daily traffic. This is typical of suburban communities like North Bend. In 2035, using an annual 3.5% growth rate, the projected traffic volume on 436th Avenue SE will be just under 15,000 vehicles per day. This is within the capacity of the 3-lane roadway. Per the Highway Capacity Manual, a 2-lane roadway with left turn lanes will operate with a LOS D up to 16,000 vehicles per day. As such, 436th Avenue SE should be capable of accommodating the projected traffic growth in the next 20 years.

With the recreational use of 436th Avenue SE, the roadway will likely see increases in traffic volumes on weekends and holidays. A count was conducted on Mt Si Road, just north of North Bend Way, to determine the average daily traffic. Upon review, the weekend peak hour volume of Mt. Si Rd was 171 vehicles per hour which occurred from 11:00 AM to 12:00 PM on a Sunday. When compared to the typical PM peak hour volume of 778 vehicles per hour on 436th Avenue SE, it was determined that improvements based on the weekday PM peak hour are sufficient to handle weekend or holiday recreational traffic volumes.

As noted in this report, increased traffic volumes are expected to adversely impact intersections along this corridor, including with the intersections of North Bend Way, Cedar Falls Way, and SE 136th Street. Improvements to these intersections are included in the recommendations for these intersections.

Non-Concurrent Intersection Analysis and Recommendations

Three intersections, one signalized, one two-way stop controlled, one roundabout, will operate at or below LOS E by 2023. Another three will fall below the mark by 2035. The following sections briefly describe potential improvements and resulting impacts for each of the three intersections.

Cedar Falls Way and 436th Avenue

This intersection allows free flow on 436th Avenue, which is oriented North/South. Cedar Falls Way approaches from the northwest and is stop controlled. According to this analysis, the intersection will continue to operate above the City's LOS standard through 2023. Between 2023 operations will degrade and is projected to operate at LOS F near 2035. Table 8 summarizes delays at this location.

Table 8. Cedar Falls Way and 436th Avenue Summary.

PM Peak Hour Scenario	Control Delay (s/veh)					LOS
	EB	WB	NB	SB	Overall	
2017 Flow	12.1	n/a	3.1	0	4.8	B
2023 Projected Flow	15.5	n/a	3.4	0	5.9	C
2035 Projected Flow	197.2	n/a	3.6	0	53.3	F
2035 Projected Flow, with EB Right Turn Only	22.7	n/a	3.6	0.0	7.8	C

Note: EB = eastbound, WB = westbound, NB = northbound, SB = southbound

To reduce the amount of delay on Cedar Falls Way, a roundabout or traffic signal should be considered. Per the TIP, a roundabout is planned for the intersection of North Bend Way and 436th Avenue. As such, a traffic signal in close proximity may create operational challenges resulting in queuing in the roundabout at North Bend Way.

MEMORANDUM

Additionally, a roundabout is also proposed at the intersection of SE 136th Street and 436th Avenue SE (see below) to accommodate increases in traffic. Installation of three roundabouts on a corridor will likely be more than needed to additional traffic. However, the delay levels at the Cedar Falls Way intersection is expected to increase even with the installation of roundabouts at intersections north and south. To accommodate the increase in traffic, traffic from Cedar Falls Way will be restricted to right turn only. Left turning vehicles from Cedar Falls Way will need to travel to the roundabout at SE 136th Street and make a U-turn. Northbound left turning vehicles can still access Cedar Falls Way through an exclusive left turn lane.

Cedar Falls Way and Maloney Grove Avenue

This intersection is currently two-way stop controlled, with Cedar Falls Way running northwest/southeast without stop control. Maloney Grove Avenue runs north/south with stop control. Table 9 summarizes the performance of this intersection.

Table 9. Cedar Falls Way and Maloney Grove Avenue Summary.

PM Peak Hour Scenario	Control Delay (s/veh)					LOS
	EB	WB	NB	SB	Overall	
2017 Flow	0	0.6	13.9	12.8	1.8	B
2023 Projected Flow	0	0.6	16.5	13.4	2.3	C
2035 Projected Flow	0.1	0.7	54.4	24.8	6.3	F
2035 Projected Flow, with Roundabout	18.8	6.9	10.0	5.3	14.7	B

Note: EB = eastbound, WB = westbound, NB = northbound, SB = southbound

While the intersection is projected to meet the City's LOS standard through 2023, it will fail by 2035. This may be another location that a roundabout can help traffic flow. Our model projects that LOS B is attainable at this location through 2035 with roundabout control.

North Bend Way and Bendigo Boulevard (SR 202)

This signal-controlled intersection includes a through and left turn lane from the East and West. From the South, there is a combined through/left turn lane as well as a right turn lane. From the North, Bendigo Boulevard approaches with a single right/through/left shared lane. North/south signal control uses split phasing while the east/west approaches has protected-permissive left turn phasing. With commercial development abutting the road on both sides, and on-street parking, the right-of-way is limited. In the next six years, the City plans to remove on-street parking from the east side of Bendigo Boulevard, north of the intersection. This modification will facilitate the creation of two northbound through lanes. However, it is expected that the split phasing will remain and continue to result in a lower level of service with these alternatives.

A roundabout is being considered at the intersection of Bendigo Boulevard and 4th Street located just north of this intersection. Construction of the roundabout would allow for the City to restrict northbound left turns during the peak period. Northbound left turning vehicles would be routed to the roundabout and then make a U-turn to travel back to the intersection and make a right turn. Southbound left turn traffic would be routed to the Bendigo Boulevard and Park Street intersection. This alternative was reviewed for both the 2023 and 2035 years.

The intersection is projected to serve at least 500 vehicles per hour in each direction in 2023. Overall delay is projected to double in the next six years with no improvements. Table 10 summarizes the delays that travelers will experience in various cases.

MEMORANDUM

Table 10. Alignment Options at Bendigo Boulevard and North Bend Way.

PM Peak Hour Scenario	Control Delay (s/veh)					LOS
	EB	WB	NB	SB	Overall	
2017 Flow	74.3	54.1	75.3	80.2	71.5	E
2023 Flow, Existing Alignment	173.2	91.5	252.3	175.0	176.5	F
2023 Flow, Two NB Through Lanes	173.2	91.5	206.0	175.0	163.5	F
2023 Flow, Park Street Diversion, Existing Alignment	150.4	89.5	133.5	153.1	133.8	F
2023 Flow, Park Street Diversion, Two Through-Lane Alignment	117.6	71	133.6	100.3	106.7	F
2035 Flow, Two NB Through Lanes	304.1	199.0	319.0	384.3	305.5	F
2035 Flow, Two NB Through Lanes, Removal of NB & SB Left Turns	119.6	216.0	191.3	215.2	191.0	F
2035 Flow, Two Through-Lane Align, Park St and Nintendo Diversions	119.6	216.0	191.3	215.2	191.1	F
2035 Flow, Two NB Through Lanes, Removal of NB & SB Left Turns, Park St and Nintendo Diversions	26.1	37.2	14.7	100.1	50.4	D
2035 Flow, Two NB Through Lanes, Removal of NB Left Turns, Park St and Nintendo Diversions, Addition of SB left turn lane	26.1	37.2	25.6	22.4	27.8	C

Note: EB = eastbound, WB = westbound, NB = northbound, SB = southbound

The intersection currently performs below the City's LOS standard and is exempted from City concurrency requirements. If the current alignment is maintained through 2023, delays will increase from 71.5 s/vehicle to 176.5 s/vehicle. This increase in delay will be slightly reduced if a second northbound through lane replaces on-street parking and if some traffic can be diverted to Park Street and the proposed Nintendo bypass as discussed above.

Removal of the left turn phasing during peak traffic times would allow for a more efficient operation. This would be due to the removal of the existing split signal phasing currently in place. To accommodate northbound and southbound traffic, vehicles would be expected to detour to other routes as discussed below:

- Northbound left turning vehicles would travel through the intersection to a proposed roundabout at the intersection of Bendigo Boulevard and 4th Street. Drivers would then travel southbound to turn right at the intersection with North Bend Way.
- Southbound left turning vehicles would be expected to do one of two detours. The first is to utilize 4th Street and travel to Ballarat Avenue to connect to North Bend Way. Because this movement is currently not allowed, feedback from the community will need to be considered in this alternative. The second route would be for southbound vehicles to travel through the intersection and then make a left turn at Park Street. This option would impact the intersection of Park Street.

The analysis above assumes that 100% of northbound movements would follow the route proposed above. The analysis also assumes that 50%, or 240 vehicles, of the southbound movements would travel through the neighborhood while 50% would travel to the Park Street intersection. Because of the increase in southbound left turning traffic at Bendigo Boulevard and Park Street, the intersection delay would increase resulting in a LOS E.

Finally, one additional alternative was reviewed to minimize the impact to the Park Street intersection. This alternative maintains two northbound lanes, no northbound left turns, and the roundabout at 4th Street. The

MEMORANDUM

southbound approach is restriped to remove parking to allow for a southbound left turn lane and a southbound through/right lane. This alternative allows southbound left turn traffic to make the left turn during all hours. Due to traffic congestion and the roundabout at 4th Street, it is assumed that 50% of the projected left turning traffic will divert through the neighborhood and access North Bend Way via Ballarat Avenue. Under this alternative, the intersection would operate at a LOS C.

In summary, it is possible to achieve an acceptable level of service at this intersection to meet concurrency requirements and minimize impacts to adjacent neighborhoods. This is based on the following:

- Diversion of northbound traffic to use either the Park Street route or the Nintendo bypass.
- Removal of the left turn movements in the northbound and southbound directions allow the removal of the split signal phasing. The inefficiency of split phasing is a key factor for the increase in delay and the resultant low level of service.
- To restrict northbound left turning movements, installation of the roundabout at 4th Street is required. This roundabout allows the northbound left turn to be prohibited. Drivers who would normally take the northbound left turn movement would need to make a u-turn at the new roundabout to continue eastbound on North Bend Way.
- With the installation of the roundabout at 4th Street, we assume 50%, or approximately 240 vehicles in the PM peak hour, of the southbound left turning traffic at North Bend Way would travel through the neighborhood to use Ballarat Avenue. The result is a reduction in delay at this intersection.

Park Street and Bendigo Boulevard

This location is currently signalized, and is projected to function at a LOS B through 2023. Park Street runs east/west with a single lane in both directions. Bendigo Boulevard (SR 202) runs north/south with a through lane and left turn lane in both directions. Left turn phasing is permissive for all directions. The 2035 traffic model predicts the intersection will fall below the City's concurrency standard by 2035. The movements with the highest delay are the westbound and southbound left turn movements.

Table 11. Park Street and Bendigo Boulevard (SR 202) Summary.

PM Peak Hour Scenario	Control Delay (s/veh)					LOS
	EB	WB	NB	SB	Overall	
2017 Flow	12.2	19.8	24.7	13.9	18.8	C
2023 Projected Flow	9.6	17.7	16.9	17.4	17.2	B
2035 Projected Flow	11.2	65.0	42.8	73.8	56.8	E
2035 Projected Flow, with WB LTL, Park St and Nintendo Diversion	28.4	29.8	61.2	41.4	47.6	D

Note: EB = eastbound, WB = westbound, NB = northbound, SB = southbound

The intersection can be brought back into concurrence with the addition of a left turn lane on the westbound approach of Park Street. Note that the operations summarized above do not include any southbound left turn volume diversion from the intersection of North Bend Way and Bendigo Boulevard as noted above.

North Bend Way and Main Avenue

Main Avenue is a minor street intersecting with North Bend Way, a primary arterial through downtown North Bend. The intersection is currently two-way stop controlled. The critical movements are the stop-controlled north

MEMORANDUM

and south approaches. There is a left turn lane on each approach. In the 2023 full build-out model, the left turn lanes are removed from Main Avenue as part of the Downtown Plaza project.

Southbound traffic is projected to experience the longest delays, though northbound delay also operates at LOS F. A signal installation at the North Bend Way and Ballarat Avenue intersection can serve as an access point for left turning traffic from Main Avenue. Additionally, some traffic can be expected to travel through the neighborhood to access the roundabout at North Bend Way and Park Street/Downing Avenue. It is recommended that the existing operation of Main Avenue remain the same. Improvements at both the North Bend Way and Ballarat Avenue and the North Bend Way and Park Street/Downing Avenue intersections will provide access to North Bend Way for travelers along Main Avenue. If delays persist, the intersection should be reviewed for a traffic control revision.

436th Avenue SE and SE 136th Street

This intersection is two-way stop controlled and operates at LOS C, according to a Synchro 9 analysis. The stop-controlled approaches from east and west are projected to operate at LOS F by 2035 assuming no alterations are made. Our model projects that a roundabout would operate at LOS D in 2035. Note that this includes additional traffic from the Cedar Falls Way and 436th Avenue SE intersection as discussed above. See Table 12 below for more detail.

Table 12. 436th Avenue SE and SE 136th Street Summary.

PM Peak Hour Scenario	Control Delay (s/vch)					LOS
	EB	WB	NB	SB	Overall	
2017 Flow	17.1	14.3	0.3	0.5	1.1	C
2035 Projected Flow	93.6	71.1	0.4	0.6	4.1	F
2035 Projected Flow, with Roundabout	8.6	10.5	31.0	22.6	26.1	D

Note: EB = eastbound, WB = westbound, NB = northbound, SB = southbound

MEMORANDUM

CONCLUSION AND RECOMMENDATIONS

In 2017, all but four intersections currently meet or exceed the City's LOS D concurrency standard. In 2023, the intersection of North Bend Way and Ballarat Avenue will meet the standard based on the proposed traffic signal installation as part of the 6-year TIP. Additionally, the intersection of North Bend Way and Park Street/Downing Avenue will have a roundabout in operation. It is expected that this intersection will operate better than LOS D, and therefore be in compliance with the City's LOS standard. Therefore, in 2023, only the intersections of North Bend Way and Bendigo Boulevard and North Bend Way and Main Street are expected to operate below LOS D.

When traffic volumes are projected to 2035, four intersections outside the downtown area also fall below LOS D. This results in six intersections operating below LOS D. Improvements to meet the LOS concurrency requirements are summarized below. These improvements will result in all but one studied intersections to operate at or above LOS D. The intersection of North Bend Way and Main Avenue is expected to continue to operate at LOS F during the peak hour in 2035.

Additionally, increased use of transit, bicycling, and walking to destinations will reduce the motor vehicle volumes and resultant delay. These improvements are outside the scope of this memorandum but should be considered for future planning efforts.

Downtown Area Recommendations

The following improvements are recommended for the downtown area:

North Bend Way and Bendigo Boulevard (SR 202)

Implement methods for reducing demand at North Bend Way and Bendigo Blvd through the following.

- Remove northbound and southbound left turns at the intersection following the completion of a roundabout at Bendigo Boulevard and 4th Street. Restrictions can be implemented during peak hours only to maintain access to trucks and other services during the day.
- Install a roundabout at Bendigo Boulevard and 4th Street.
- Construct both the Park Street and Nintendo bypass roads.
- Rechannelize the southbound approach to include a left turn lane. Install/maintain protected permitted left turn phasing during the peak hour.

Due to the impact to adjacent businesses and the potential for additional traffic along 4th Street, consultation with business and residents is recommended prior to implementation.

Park Street and Bendigo Boulevard (SR 202)

- Add a westbound left turn lane on Park Street.

North Bend Way and Ballarat Avenue

- Following the construction of the roundabout at North Bend Way and Park Street/Downing Avenue, reevaluate the need for a traffic signal at the intersection of North Bend Way and Ballarat Avenue. In the interim, if delays continue to increase consider an all-way stop as a temporary treatment until installation of a traffic signal.

MEMORANDUM

Southeast North Bend Recommendations

The following improvements are recommended for the southeast portion of the city:

Cedar Falls Way and Maloney Grove Avenue

- Construct a roundabout at this intersection.

SE 136th Street and 436th Avenue SE

- Construct a roundabout at this intersection.

Cedar Falls Way and 436th Avenue SE

- Following construction of the roundabout at SE 136th Street and 436th Avenue SE, restrict eastbound movements to right turn only. This restriction can be implemented when delays on Cedar Falls Way exceed the City's concurrency requirement.

The expected amounts of delay and resultant level of service for the intersections in 2035 is shown below. This information assumes the recommended improvements have been installed and are operational.

Table 13. Projected Delays and Level of Service in 2035 with Recommended Improvements.

Intersection	Control Delay (s/veh)					LOS
	EB	WB	NB	SB	Overall	
140th Street, Middle Fork Road, 468th Avenue	5.3	n/a	5.3	6.0	5.6	A
North Bend Way and 140th Street	11.8	6.6	n/a	7.8	9.3	A
Cedar Falls Way and 436th Avenue	22.7	n/a	3.6	0.0	7.8	C
Cedar Falls Way and 432nd Avenue	0.2	0.9	30.7	19.4	4.6	D
Cedar Falls Way and Maloney Grove	18.8	6.9	10.0	5.3	14.7	B
North Bend Way and 436th Avenue	14.8	22.3	22.9	n/a	19.6	C
North Bend Way and Ballarat Avenue	26.8	11.8	29.3	44.5	24.4	C
North Bend Way and Bendigo Boulevard	26.1	37.2	25.6	22.4	27.8	C
North Bend Way and Main Avenue	0.3	2.3	>100	>100	2.9	F
North Bend Way and Park Street	21.3	30.1	36.4	23.1	28.5	D
Park Street and Bendigo Boulevard	28.4	29.8	61.2	41.4	47.6	D
436th Avenue SE and SE 136th Street	8.6	10.5	31.0	22.6	26.1	D
468th Avenue SE and SE 144th Street	n/a	10.5	0	0.4	3.1	B

Note: EB = eastbound, WB = westbound, NB = northbound, SB = southbound